# STATEMENT OF WORK Dike (356) Missouri

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

### **DESIGN**

## **Deliverables:**

- 1. Survey notes which show that a thorough and detailed site survey was completed.
  - a. Survey notes shall be in accordance with NRCS Technical Release 62, Engineering Field Handbook, Chapter 1 and/or standard industry practice.
  - b. If survey equipment with automatic / electronic data collection devices is used, a print out of the data and/or a reference to the location where the electronic file is stored shall be included in the file.
  - c. Elevations shall be referenced to a bench mark. A temporary bench mark with an assumed elevation is acceptable.
- 2. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
  - a. Practice purpose(s) as identified in the conservation plan
  - b. List of required permits to be obtained by the client
  - c. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A Engineering Activities Affecting Utilities 503.00 through 503.06)
  - d. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
    - i. Geology and Soil Mechanics (NEM Subpart 531a)
      - Earthfill materials
      - Moisture and compaction requirements
    - ii. Hydrology/Hydraulics
      - Discharge Flows
      - Water Surface Profiles With and Without Dike
      - Evaluations for Floodplain Development Permits as Required
      - Spillway Capacities (type, sizes, elevations)
    - iii. Structural including dike classification
      - NRCS Job Classification
      - Hazard Classification
      - Earthfill and Excavation Quantities
      - Borrow areas
      - Material Quantities (pipes, anti-seep collars, trash racks, . . .)
      - Clearing Quantities
    - iv. Vegetation
      - (See Critical Area Planting 342 Statement of Work)
    - v. Environmental Considerations
    - vi. Safety Considerations (NEM Part 503-Safety, Subpart A, 503.10 through 503.12)
- 3. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits...
- 4. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
- 5. Operation and Maintenance Plan (National Operation and Maintenance Manual 500.70 and 500.40 through 500.42)
- 6. Certification that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03 (a) (3)).
- 7. Design modifications during installation as required.

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#### INSTALLATION

## **Deliverables**

- 1. Pre Installation conference with client and contractor.
- 2. Verification that client has obtained required permits.
- 3. Staking and layout according to plans and specifications including applicable layout notes.
- 4. Installation inspection (according to inspection plan as appropriate).
  - a. Actual materials used (Part 512, Subchapter D Quality Assurance Activities, 512.33)
  - b. Inspection records
- 5. Facilitate and implement required design modifications with client and original designer
- 6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the installation process and materials meets design and permit requirements.

#### CHECK OUT

#### **Deliverables**

- 1. As-Built documentation.
  - a. Extent of practice units applied
    - Profile and cross sections of excavations
    - Profile and cross sections of embankment
    - Profile and cross sections of spillways
    - Size and elevations of pipe inlets and outlets
    - Vegetation establishment if required (See Critical Area Planting 342 Statement of Work)
  - b. Drawings
  - c. Final quantities
- 2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03 (c) (1)).
- 3. Progress reporting.

### **REFERENCES**

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Dike, 356
- National Operation and Maintenance Manual
- NRCS Technical Release 60, Earth Dams and Reservoirs
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook